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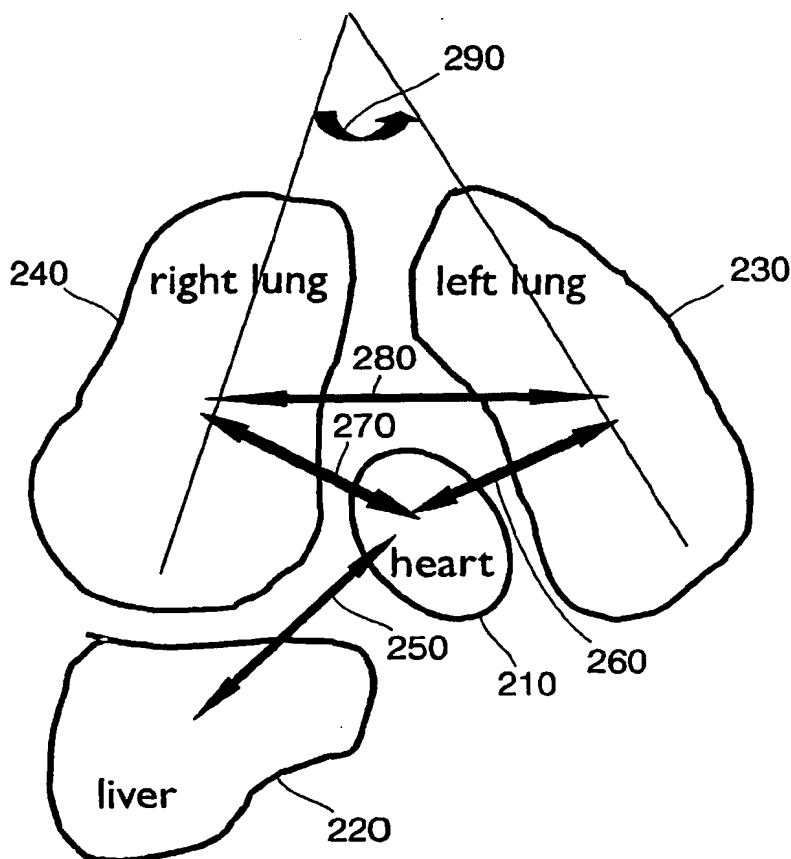
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[Continued on next page]

(54) Title: HIERARCHICAL IMAGE SEGMENTATION



(57) Abstract: An apparatus 1000 includes an input 1010 for receiving an N-dimensional signal,  $N \geq 2$ . A storage 1030 stores a composite model of a composite structure for estimating parameters of the model with respect to the signal. The composite model is based on constituent models 210-290 that each correspond to a constituent structure in the signal and that are incorporated in the composite structure. Each constituent model is designated for estimating parameters of the constituent model with respect to the signal based on prior knowledge of the constituent structure. At least two of the constituent models are based on differing technologies. Each constituent model is provided with a uniform interface for controlling the constituent model and for retrieving parameters estimated by it. A processor 1020 is programmed to estimate the model parameters by controlling the constituent models to estimate their parameters; to retrieve estimated parameters from the constituent models; and to estimate parameters of the model in dependence on the retrieved parameters.

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ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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# INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06T5/00 G06K9/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 446 060 B1 (BERGMAN LAWERENCE D ET AL) 3 September 2002 (2002-09-03)  abstract column 5, line 23 - column 7, line 14 figures 2A,2B	1-3, 5-12,14, 15,20,21
A	WO 01/37222 A (ANTHROPICS TECHNOLOGY LTD ; WILES CHARLES STEPHEN (GB); NEWMAN RHYS AN) 25 May 2001 (2001-05-25) abstract page 16, line 1 - page 17, line 3 page 27, line 9 - page 28, line 4 figure 5	1-21

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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			EP 1272979 A1	08-01-2003
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